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ABSTRACT

Since 1971 the approach adopted in the teaching of English phonetics in Denmark has been a contrastive one. In this paper it is argued that although the original contrastive hypothesis (Lado 1957) has to be modified and weakened, a contrastive approach is highly useful in learning and teaching the pronunciation of a foreign language. Selected features of English and Danish phonetics are discussed. Within the area of consonants special attention is devoted to the transference to English of the Danish voicing neutralization, i.e., of the suspension in word-final and -medial position of the opposition between /p t k/ and /b d g/. As a result of this neutralization Danes find it difficult to distinguish between English words like "bicker" and "bigger," "cap" and "cab," etc. A section on English and Danish vowels is primarily devoted to a discussion of the difficulties which Danes have in keeping words like "luck" and "lock," "hut" and "hot," etc. apart, in spite of the fact that they possess vowels of nearly the same quality in their own language. The paper concludes with a report on a recent accustical investigation of Danish intonation, which may provide the basis for a contrastive analysis of English and Danish intonation. (Author/AM)

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The teaching of English phonetics in Denmark: A problem of transference

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Introduction

Since the days of Otto Jespersen phonetics has played an important part in the teaching of spoken English in Denmark. Jespersen devoted a considerable part of his research time to phonetics and wrote several books on this subject. One of these books dealt with English phonetics. It was published in 1912 and was used in Denmark for more than half a century. In 1950 it was revised and translated into English by Bengt Jürgensen, and it was used in Danish universities, training colleges, etc. right up to 1970. Jespersen even found time to write an elementary English schoolbook, in which he used phonetic transcription. If the standard of English pronunciation is relatively good in Denmark, this is undoubtedly largely due to the pioneer work done by Jespersen. Some phoneticians think very highly indeed of Danes in this respect. Here is a quotation from a paper by Seymour Chatman (1966, p. 24):

Because of excellent language instruction in Danish schools and because of certain similarities between Danish and English phonological systems, Danes tend to speak a phonetically more accurate form of English than practically any other foreign language group. Even those who speak only a few words manage to sound very accomplished indeed.

Perhaps there is some truth in this. However, if this passage is read aloud in the characteristic English pronunciation used by most Danes it seems clear that Chatman's statement ought at least to be toned down somewhat.

In the late 1960's it was felt that Jespersen's textbook had had its day and that new textbook material was needed in Denmark. Therefore two books were written, a separate book on English intonation and a book on English phonetics excluding intonation. Both were published in 1971. Now at the time when these books were being written contrastive analysis had become a well-established method. Robert Lado had written *Linguistics across Cultures* in 1957, the fundamental assumption of his book being that individuals tend to transfer the forms and meanings of their native language,

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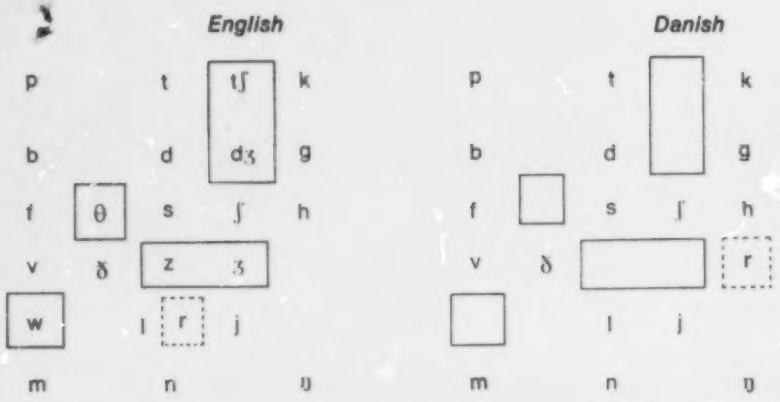
both productively and receptively, when attempting to learn a foreign language. It is no secret that since the early days of contrastive analysis a good deal of criticism has been levelled at this method. It has been characterized as *a priori*, and critics have claimed that it does not account for the variegated reality made up by actual error production. The contrastive hypothesis has been modified and weakened. However, contrastive analysis can hardly be regarded as *passé*. Although some errors are not due to interference, there can hardly be any doubt that a considerable number of errors which are made in the pronunciation of a foreign language are due to transference of source language habits. It has also been pointed out that contrastive analysis is most predictive at the level of phonology (Richards 1971). On the basis of a fair amount of teaching experience I believe that Danes who are in the process of learning English pronunciation are faced with a set of problems which is closely connected with their point of departure and which is therefore largely different from the problems facing other foreigners. Obviously a systematic and extensive investigation of the errors actually produced by Danes can confirm or weaken this claim. Such an investigation is being carried out as a part of the Project in Error Analysis at the University of Copenhagen. Data have been collected but since they have not yet been classified and interpreted, I am unable to report on this investigation. Therefore the following remarks are based on my own teaching experience and on a contrastive description of Danish and British English pronunciation. In the following I shall say most about consonants, less about vowels and prosody.

English and Danish Consonants

Let us first look at the consonants of English and Danish. By means of the commutation test we can establish the following inventories of contrastive consonant sounds:



Solid lines show areas where an English consonant is unmatched by anything in Danish. The opposite situation – Danish consonants unmatched by English ones – does not exist, with the possible exception of *r*. In the case of English and Danish *r*, I have used dotted lines in the diagrams in order to indicate that it is problematic whether we are here allowed to speak of equivalence. Since Danish *r* is a uvular-pharyngeal fricative it differs from English *r* in respect of both place and manner.

It may now be expected that Danes will have difficulties with the English consonants indicated with solid lines. And in fact errors are often made here. For example, Danes tend to substitute their native [s] for the unfamiliar target sounds [θ] and [z], with the result that words like *think*, *zinc* and *sink* are pronounced alike, namely as [sɪŋk]. Similarly, Danes find it difficult to distinguish between English [ʃ] and [ʒ], between [v] and [w], and between the affricates [tʃ, dʒ] and [t] and [d] plus [j]. The errors which Danes make within this sound area may lead to *misunderstanding*. Our teaching strategy is to train our students in perception and production of these distinctions and in the correct distribution of these sounds in the vocabulary. In order to attain the last goal we use phonetic transcription extensively.

Consider secondly the English consonants whose mispronunciation by Danes leads not to misunderstanding but to a heavy *foreign accent*. To this category belongs *r*, for which Danes tend to substitute their uvular fricative. Another error which should probably be assigned to this category is the substitution of the Danish 'soft *d*' for the English fricative which occurs in words like *though*, *rather*, *bathe*. The Danish [ð], which occurs in words like *bide* 'bite' and *bad* 'bath', is not apical but is loosely articulated between the blade and

front of the tongue and the alveolar ridge. A third error belonging to this category is the transference of Danish clear *l* – the only *l*-type found in our standard pronunciation – to English in those positions where dark *l* is used by native speakers, for example in *ball, battle.*

Within the consonant system, transference of the remaining Danish sound types to English causes little difficulty in comprehension and little attention to accent.

Now a contrastive analysis of two sound systems does not only comprise the establishment of the *inventories* of contrastive sound segments but also a description of the *variation* and *distribution* of these contrastive sound segments. The fact that the English phoneme /l/ has both a clear and a dark allophone, but that the Danish /l/-phoneme is always realized as a clear sound, has already been mentioned. As regards distribution, a major difference is found between English and Danish within the area of stop consonants. In English the opposition between voiced and voiceless stops is operative initially, medially and finally in words. In Danish, on the other hand, the opposition between /p t k/ and /b d g/ is only operative in word-initial position, cf. examples like *pil* ≠ *bil* ('arrow' – 'car'), *tag* ≠ *dag* ('take' (imp.) – 'day'), and *kår* ≠ *går* ('circumstances' – 'goes'). Word-medially before an unstressed vowel this opposition is neutralized, i.e. a word like *lappe* 'patch' is pronounced exactly like *labbe* 'lap up', and a word like *lække* ('leak' (v.)) is pronounced exactly like *lægge* ('lay'). In final position the opposition between /p t k/ and /b d g/ is also suspended in Danish, cf. examples like *lap* = *lab* ('patch' (n.) – 'paw') and *læk* = *læg* ('leak' (n.) – 'lay' (imp.)). Phonetically, we are here faced with oscillating manifestation, for the final stops are sometimes pronounced with aspiration and sometimes without aspiration.

To Danes it is a real problem to distinguish between voiced and voiceless stops medially and finally in English words, for example in *rapid* : *rabid* and *wrote* : *road.* It was recently pointed out to me that we may here speak about a 'perception blind spot'. In an American film which was shown on Danish television, one of the actors said *I don't want my two dollars back.* In the subtitles the final word of this sentence was translated into the Danish word for *bag*, with the result that the viewers were left in a state of total confusion.

Before passing on to vowels I would like to mention one problem which cannot automatically be predicted from a contrastive analysis. In words like *please, blues, cause, has* Danes tend to substitute for vowel length plus lenis *s* the consonant sequence soft *d* plus voiceless fortis *s*, i.e. they

pronounce these words [pliðs, bluðs, kɔðs, hæðs]. I think the following explanation may be given: in Danish schools teachers of English traditionally insist on voiced *s*'es, not only medially and initially but also finally. Now what should a Dane do when attempting to imitate a vowel followed by a voiced *s* that does not occur in his own language? I think that he tries to produce the features contained in [z], namely alveolarity, sibilance and voicing, but that he distributes these features over two segments familiar to him from his own language, as shown in the following figure:

In order to eradicate pronunciations like [pliðs, bluðs] we emphasize with our students that word pairs like *peace* : *peas* and *close* (adj.) : *close* (v.) in English are kept apart by means of vowel length and that there is no need to produce a voiced *s*.

English and Danish Vowels

Let us turn now to English and Danish vowels. By means of the commutation test we can set up the following vowel inventories:

English

iː		uː
ɪ		ʊ
e	ɜː, ə	ɔː
æ	ʌ	ɑː, ɒ

Danish

i, iː y, yː		u, uː
e, eː ø, øː		o, oː
ɛ, ɛː œ, œː	ə	ɔ, ɔː
a, aː		

Within the area of vowel sounds I shall discuss only one problem, namely the difficulty which Danes have with the English sounds /ʌ/ and /ɤ/. From a purely phonetic point of view we possess in Danish a vowel which is closely related to English /ʌ/, namely the allophone of the short *a*-phoneme which occurs before labial and velar consonants. It is found in words like *lak* 'lacquer' and *kap* 'cut' (imp.), which may be compared with English *luck* and *cup*. We have also in Danish an /ɔ/-vowel which is not too different from English /ɤ/; it occurs in words like *lok* 'lock', *kop* 'cup'. And the allophone of the Danish short /ɔ/-phoneme which occurs next to *r* is practically identical with English /ɤ/, note an example like *rotte* 'rat'. Now why is it so difficult for Danes to distinguish between *luck* and *lock*, *cup* and *cop*, etc. when they have in their own language practically the same distinction? In this connection it is interesting what Lado writes in *Linguistics across Cultures* (p. 15):

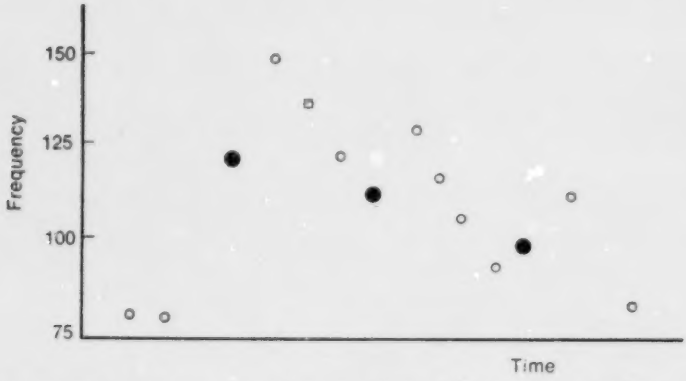
my experience ... has been that the kind of problem in which part of a phoneme in the native language can pass as a separate phoneme in the foreign language, and other parts of the same native-language phoneme pass as a different phoneme in the foreign language – that kind of problem is by far the most difficult to overcome.

This seems exactly to be the problem facing Danes with English /ʌ/ and /ɤ/. Only part of the Danish /a/-phoneme may be used as English /ʌ/, and only part of the Danish /ɔ/-phoneme may be used as English /ɤ/. Therefore, although the sounds which occur in English *luck* : *lock*, etc. are perfectly familiar to Danes, they have great difficulties with them. There are also additional problems with this vocalic opposition which may briefly be mentioned. First, there is great dialectal and sociolectal variation in the manifestation of the Danish /a/- and /ɔ/-phonemes; in particular it should be noted that the /ɔ/-phoneme is realized as an unrounded low vowel in conservative upper class Danish. Secondly, the fact that word pairs like *luck* : *lock*, etc. are kept apart in a different way in most American dialects confounds the foreigner. And thirdly, the orthography is of little help, since the letter *o* symbolizes both these vowels, for example in *monkey* versus *donkey*.

English and Danish Prosody

Finally a few remarks about prosody. Within this area of pronunciation the teaching of English phonetics in Denmark is less contrastive than within the area of sound segments.

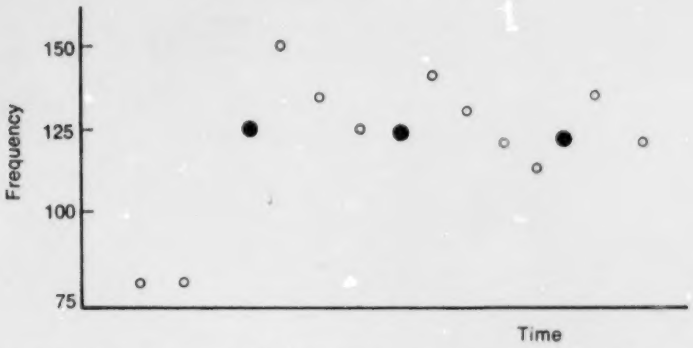
In the first place, a contrastive description of stress, rhythm and intonation will perhaps always have to be less specific than a contrastive description of sound segments. If one looks at a book like Moulton's *The Sounds of English and German*, one notices that only thirty pages are devoted to prosody out of a total of 145 pages. In the case of English and Danish, secondly, the lack of a description of Danish intonation has precluded a contrastive approach to this area of English pronunciation. Jespersen wrote a few pages on intonation in his textbook on Danish phonetics, and in 1933 Alf Bo wrote a short monograph on Danish intonation. However, these descriptions are too impressionistic and too vague to be of much help. In 1966 Seymour Chatman published a short paper on American English, British English and Danish intonation. The only fairly comprehensive description of Danish intonation given so far dates from 1976. It is an acoustical investigation by Nina Thorsen. Thorsen has investigated the intonation of declarative sentences, interrogative sentences and non-terminal interrogative clauses in the speech of four speakers of Advanced Standard Copenhagen. On the basis of her results she sets up the following model for short declarative sentences:



Declarative sentenses, e.g. 'Der går massevis af flyvemaskiner til Beograd' (There are lots of planes for Belgrade).

The following results may be noted: 1) sentence-initial unstressed syllables are lower than the first stressed syllable; 2) the first stressed syllable is relatively high; 3) the stressed syllables describe a falling contour; 4) a stressed syllable is lower than the immediately following unstressed syllable; 5) the unstressed syllables which occur between two stressed ones describe a falling contour.

For statement questions Thorsen sets up this model:



Statement questions, e.g. 'Der går massevis af flyvemaskiner til Beograd?' (There are lots of planes for Belgrade?)

The only difference between this intonation contour and the preceding one is that in this case the stressed syllables describe a level contour. Other interrogative sentences, that is, questions formed with inversion or with interrogative pronouns, are intermediate between the two above contours. In other words, the line which may be drawn through the stressed syllables is slightly falling. The intonation contour of questions with interrogative pronouns is steeper than that of questions with inverted word order. Non-terminal questions with inversion are very close to being level.

A lot of work remains to be done in the description of Danish intonation and within the area of contrastive English-Danish intonation. To me it seems likely that pitch range is on the whole narrower in Danish than in British English (cf. Chatman 1966). In Thorsen's material it does not exceed one octave for her male subjects, and it is even narrower for her female subjects. I am also fairly confident that complex tones, for example fall-rise, which are very common in British English, are practically absent in Danish. If you pronounce any Danish word with falling-rising intonation, for example *nej* 'no', the effect is utterly un-Danish and strikes Danes as very amusing.

Within the areas of stress and rhythm there are certain basic similarities between Danish and English, but time prevents me from discussing these aspects of prosody. In conclusion I would like to say that although Danes have far greater opportunities of listening to English and of speaking English today than a generation ago, English phonetics is still considered a useful and relevant discipline in Denmark.

Acknowledgment: I am indebted to Jens Normann Jørgensen, from whose prize essay on American English and Danish *r*-sounds I have gained considerable inspiration.

References

Bo, A. (1933). *Tonegangen i Dansk Rigsmaal.* Copenhagen.

Chatman, S. (1966). Some intonational crosscurrents: English and Danish. *Linguistics 21*, 24-44.

Davidsen-Nielsen, N. (1971). *Engelsk Fonetik.* Copenhagen.

Hartvigson, H., and B. Jürgensen (1971). *Engelsk Intonation.* Copenhagen.

Jespersen, O. (1912). *Engelsk Fonetik.* Copenhagen.

Jespersen, O. (1950, revised and translated by B. Jürgensen). *English Phonetics.* Copenhagen.

Jespersen, O. (1934, 3rd edition). *Modersmålets Fonetik.* Copenhagen.

Lado, R. (1957). *Linguistics across Cultures.* Ann Arbor.

Moulton, W. G. (1962). *The Sounds of English and German.* Chicago.

Richards, J. (1971). A non-contrastive approach to error analysis. *English Language Teaching* 25.

Thorsen, N. (1976). An acoustical investigation of Danish intonation: preliminary results. *Annual Report of the Institute of Phonetics, University of Copenhagen* 10, 85-147.